P.03/12

U.S.S.N. 10/604,498

15-XT-6176 (GEMS-A 0130 PA)

In the claims:

1. (Currently Amended) An imaging X-ray tube rotor assembly for an imaging tube comprising:

2

a shaft;

an x-ray tube rotor core produced at least partially of a non-corrosive material and integrally formed as a single component with said shaft comprising;

at least one slot; and

at least one bar; and

- a non-sprayed-on non-corrosive sleeve directly coupled to, at least partially covering, and rotational with said rotor core.
- 2. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said rotor core is produced at least partially from a magnetic non-corrosive material.
- 3. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said rotor core approximately comprises at least 12% chromium.
- (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said rotor core at least partially comprises stainless steel.
- 5. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said non-sprayed-on non-corrosive sleeve comprises an oxidized exterior surface.

U.S.S.N. 10/604,498

3 15-XT-6176 (GEMS-A 0130 PA)

- 6. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said slot is integrally formed with said rotor core and said bar is produced at least partially from a non-magnetic highly conductive material coupled to said slot.
- 7. (Original) An imaging X-ray tube rotor assembly as in claim 6 wherein said non-magnetic highly conductive material comprises at least one of the following: copper, aluminum, silver, nickel, cobalt, and an alloy formed of two or more of the stated materials.
- 8. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 further comprising:
 - a plurality of slots integrally formed with said rotor core; and
- a plurality of bars produced at least partially from a non-magnetic highly conductive material and coupled to said plurality of slots.
- 9. (Original) An imaging X-ray tube rotor assembly as in claim 8 wherein said non-magnetic highly conductive material comprises at least one of the following: copper, aluminum, silver, nickel, cobalt, and an alloy formed of two or more of the stated materials.
- 10. (Previously Presented) An imaging X-ray tube rotor assembly for an imaging tube comprising:

a rotor core comprising;

at least one slot; and

at least one bar;

a non-sprayed-on non-corrosive sleeve coupled to and at least partially covering said rotor core; and

U.S.S.N. 10/604,498

4 15-XT-6176 (GEMS-A 0130 PA)

a sheet coupled to said rotor core and produced at least partially from a non-magnetic highly conductive material.

- 11. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein an exterior surface of said non-sprayed-on non-corrosive sleeve is oxidized.
- 12. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein an exterior surface of said non-sprayed-on non-corrosive sleeve is non-oxidized.
- 13. (Original) An imaging X-ray tube rotor assembly as in claim 10 wherein said non-magnetic highly conductive material comprises at least one of the following: copper, aluminum, silver, nickel, cobalt, and an alloy formed of two or more of the stated materials.
- 14. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said non-sprayed-on non-corrosive sleeve comprises approximately at least 12% chromium.
- 15. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said non-sprayed-on non-corrosive sleeve comprises stainless steel.
- 16. (Currently Amended) An imaging X-ray tube rotor assembly comprising:

[[a]]an x-ray tube rotor core produced at least partially from stainless steel and comprising;

P.06/12

U.S.S.N. 10/604,498

15-XT-6176 (GEMS-A 0130 PA)

- a plurality of slots integrally formed with said rotor core; and
- a plurality of bars produced at least partially from a non-magnetic highly conductive material and coupled to said plurality of slots; and

a non-sprayed-on sleeve in contact with, coupled over, and rotational with said rotor core.

5

17. (Canceled)

18. (Currently Amended) A method of producing an imaging Xray tube rotor assembly comprising:

forming a rotor core at least partially from a magnetic non-corrosive iron based material having at least one slot, wherein said rotor core and said at least one slot are integrally formed as a single component; and

forming a sleeve produced at least partially from a non-magnetic, nonsprayed-on, and non-corrosive material directly over and in contact with said rotor core.

- 19. (Original) A method as in claim 18 wherein forming a rotor core comprises forming said rotor core at least partially from chromium.
- 20. (Currently Amended) A method as in claim-18 of producing an imaging X-ray tube rotor assembly comprising:

forming a rotor core at least partially from a magnetic non-corrosive iron based material;

forming a sleeve produced at least partially from a non-magnetic, nonsprayed-on, and non-corrosive material directly over and in contact with said rotor core; and

P.07/12

U.S.S.N. 10/604,498

15-XT-6176 (GEMS-A 0130 PA)

further comprising forming a sheet over said rotor core and at least partially from a non-magnetic highly conductive material.

- 21. (Canceled)
- 22. (Currently Amended) A method as in claim 18 of producing an imaging X-ray tube rotor assembly comprising:

forming a rotor core;

forming a sleeve over and in contact with said rotor core from at least partially a non-sprayed on non-corrosive material; and

further comprising oxidizing inducing oxidation of an exterior surface of said sleeve through applied heat.

23. (Original) A method as in claim 18 further comprising: integrally forming a slot in said rotor core; and

forming a bar within said slot and at least partially from a non-magnetic highly conductive material.

- 24. (Original) A method as in claim 18 further comprising: integrally forming a plurality of slots in said rotor core; and forming bars within said plurality of slots and at least partially from a non-magnetic highly conductive material.
- 25. (Original) A method as in claim 18 further comprising oxidizing an exterior surface of the imaging tube rotor assembly.

AUG-03-2005 14:44

U.S.S.N. 10/604,498

7

15-XT-6176 (GEMS-A 0130 PA)

26. (Previously Presented) An imaging X-ray tube rotor assembly as in claim 1 wherein said non-sprayed-on non-corrosive sleeve comprises an oxidized exterior surface generated by a greening effect.